## Claims

1. A text document capture method for digitizing a text document segment in printed form, comprising:

imparting lateral jittering between a digital imaging device and the text document;

obtaining multiple laterally-displaced digital images of all of the text document segment;

forming from the multiple laterally displaced images an enhanced resolution representation of the text document; and

de-blurring the enhanced resolution representation of the text document.

2. The method of claim 1 in which the lateral jittering between the digital imaging device and the text document is imparted in a pair of transverse directions.

3. The method of claim 2 in which the transverse directions are generally perpendicular to each other.

4. The method of claim 2 in which the lateral jittering is imparted simultaneously in the pair of transverse directions.

5. The method of claim 1 in which the lateral jittering is cyclic.

6. The method of claim 1 in which the digital imaging device includes an array of optical detectors corresponding to pixels and having pixel dimensions and the jittering moves the digital imaging device by about the pixel dimensions.

7. The method of claim 1 in which the text document segment is substantially all of the text document.

8. The method of claim 1 in which the forming the enhanced resolution

representation of the text document includes calculating weighted sums from the multiple laterally displaced images.

9. The method of claim 1 in which de-blurring the enhanced resolution representation of the text document includes conforming the enhanced resolution representation to only two image levels.

10. The method of claim 9 in which de-blurring the enhanced resolution representation of the text document includes applying first and second thresholds to identify initial portions of the enhanced resolution representation as being of the two image levels.

11. The method of claim 9 in which de-blurring the enhanced resolution representation of the text document includes applying a blur filter to the enhanced resolution representation.

12. The method of claim 11 in which the digital imaging device includes an array of optical detectors corresponding to pixels and having pixel dimensions and in which the blur filter has a filter dimension corresponding to one of the pixel dimensions.

13. A text document capture system for digitizing with a digital imaging device a segment of a text document in printed form, comprising:

a jittering mechanism for imparting lateral jittering between the text document and the digital imaging device while it obtains multiple laterally-displaced digital images of all of the text document segment; and

a processing system for forming an enhanced resolution representation of the text document segment from the multiple laterally displaced images and for

de-blurring the enhanced resolution representation.

14. The system of claim 13 in which the jittering mechanism includes oscillators with transverse orientations for imparting cyclic lateral jittering in transverse directions between the text document and the digital imaging device.

15. The system of claim 14 in which the oscillators include piezo-electric oscillators.

16. The system of claim 13 in which the jittering mechanism imparts lateral jittering on the digital imaging device.

17. The system of claim 13 in which in which the digital imaging device includes an array of optical detectors corresponding pixels and having pixel dimensions and the jittering mechanism moves the digital imaging device by about the pixel dimensions.

18. The system of claim 13 in which the text document segment is substantially all of the text document.

19. The system of claim 13 in which the processing system includes a computer that executes software instructions to form the enhanced resolution representation of the text document segment and to de-blur the enhanced resolution representation.

20. The system of claim 13 in which de-blurring the enhanced resolution representation of the text document includes conforming the enhanced resolution representation to only two image levels.

21. The system of claim 20 in which de-blurring the enhanced resolution representation of the text document includes applying first and second thresholds

to identify initial portions of the enhanced resolution representation as being of the two image levels.

22. The system of claim 20 in which de-blurring the enhanced resolution representation of the text document includes applying a blur filter to the enhanced resolution representation.

23. The system of claim 22 in which the digital imaging device includes an array of optical detectors corresponding to pixels and having pixel dimensions and in which the blur filter has a filter dimension corresponding to one of the pixel dimensions.

24. The system of claim 13 further comprising a jitter calibration target of which a digital image is obtained by the digital imaging device for calibrating the extent of jittering imparted by the jittering mechanism.

25. In a computer-readable medium, text document capture software for digitizing with a digital imaging device a text document segment in printed form, comprising:

software for imparting controlled lateral jittering between the text document and the digital imaging device;

software for obtaining multiple laterally-displaced digital images of all of the text document segment;

software for forming an enhanced resolution representation of the text document segment from the multiple laterally displaced images; and

software for de-blurring the enhanced resolution representation.

26. The medium of claim 25 in which the lateral jittering between the

digital imaging device and the text document is imparted in a pair of transverse directions.

27. The medium of claim 25 in which the digital imaging device includes an array of optical detectors corresponding to pixels and having pixel dimensions and the jittering moves the digital imaging device by about the pixel dimensions.

28. The medium of claim 25 in which the software for forming the enhanced resolution representation of the text document includes software for calculating weighted sums from the multiple laterally displaced images.

29. The medium of claim 25 in which the software for de-blurring the enhanced resolution representation of the text document includes software for conforming the enhanced resolution representation to only two image levels.

30. The medium of claim 29 in which the software for de-blurring the enhanced resolution representation of the text document includes software for applying first and second thresholds to identify initial portions of the enhanced resolution representation as being of the two image levels.

31. The medium of claim 29 in which the software for de-blurring the enhanced resolution representation of the text document includes software for applying a blur filter to the enhanced resolution representation.

32. The medium of claim 31 in which the digital imaging device includes an array of optical detectors corresponding to pixels and having pixel dimensions and in which the blur filter has a filter dimension corresponding to one of the pixel dimensions.

33. An image capture method for digitizing a spatially piecewise constant

image, comprising:

imparting lateral jittering between a digital imaging device and the spatially piecewise constant image;

obtaining multiple laterally-displaced digital images of all of the spatially piecewise constant image;

forming from the multiple laterally displaced images an enhanced resolution representation of the spatially piecewise constant image; and

de-blurring the enhanced resolution representation of the spatially piecewise constant image.